

New Regulation on Child Restraints: Benefits for Consumers

Seminar on "Child Restraint System development and certification driven by I-size standard and Euro NCAP protocols", 6 June 2013

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(European) Consumer Groups
Umbrella Organisations



The European
Umbrella for
Comparative Testing



The European
Consumer Voice in
Standardisation



The global voice for consumers

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Introduction




Consumer groups historically test CRS:

- Consumer information (steering market)
- Influence Regulations

Big achievements, but:
Still room for improvement



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Introduction

Current situation:

- Children up to 1.35m / 1.50m must be transported in a R44 approved CRS.
- Relatively low number of fatalities
- Concerns on misuse rates


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Introduction

Car manufacturers and CRS manufacturers have a shared responsibility for the safe transport of children


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Current Situation

Main concerns on R44 raised in GRSP

- Frontal impact, **no** side impact
- Forward facing from 9 kg onward
- Classification difficult to understand -> misuse (universal solutions not very universal)



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Current Situation 

Consumer tests encourage side protection




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Current Situation 

Consumer groups encourage longer RWF transport
Not really facilitated by Regulation 44




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Current Situation 

Check when buying:

- ECE 44 approval label
- Correct mass group
- Fits in your car(s)



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Current Situation 

Table 1
Table of vehicle handbook information on child restraint systems installation suitability for various seating positions

Mass Group	Seating position (or other use)			
	Front passenger	Rear outboard	Rear centre	Intermediate outboard
Group 0 up to 10 kg				
Group 0+ up to 13 kg				
Group I 9 to 18 kg				
Group II 15 to 25 kg				
Group III 22 to 36 kg				

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Current Situation 

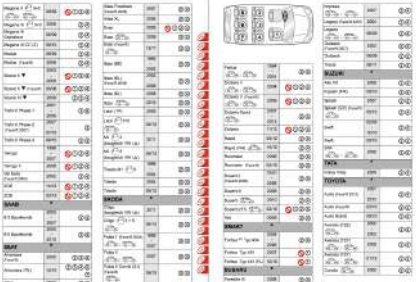
various ISOFIX positions

Mass Group	Rotation	Forward	Reverse	Other
0-12 kg	F	ISOFIX		
	O	ISOFIX		
0+ up to 13 kg	E	ISOFIX		
	D	ISOFIX		
9 to 18 kg	B	ISOFIX		
	A	ISOFIX		
15 to 25 kg				
22 to 36 kg				

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Current Situation 




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Current Situation 

Group 0+ (<13kg)




Confusing info on age equivalent:

Manufacturer A: <15 months

Manufacturer B: <18 months


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Current Situation 

Interface issues:

- Insufficient belt length
- Poor belt geometry
- Interaction with car interior

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Current Situation 

Low Isofix awareness:

- 1% ISOFIX CRS in cars seen,
- >45% of cars is equipped with isofix attachment points.
- 20% drivers know ISOFIX

(CEDRE study, 419 children in 177 cars, aug 08 – jul 09, France)


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Current Situation 

Misuse modes:


- Wrong restraint system (e.g. Inappropriate mass group)
- CRS not correctly installed (e.g. Belt routing, slack)
- CRS not allowed on seating position (active frontal airbag, support leg on luggage compartment,...)
- Incorrect restraining of child (e.g. slack in harness, belt under arm)

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Current Situation 




Top tether
high mis- and non-use rates



Support leg
luggage compartment


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Current Situation 

Message to consumers buying CRS:

- CRS must be ECE 44 approved
- Child must fit within weight range(s) of CRS
- CRS must be suitable for use in your car(s)
- Level of protection depending on correct use


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Current situation 

Advice to consumers using CRS:

- Install carefully
- Tighten harness
- Switch to FWF as late as possible
- Change to bigger CRS not too early


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I-SIZE

Phase 1: integral isofix systems

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i-Size 

Improvements compared to R44:

1. Stature based classification
2. Side impact test
3. Rearward facing mandatory up to 15 months minimally
4. Improved car-CRS interface

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i-Size 

- Stature based classification
- Range to be determined by CRS manufacturer




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i-Size 

Improved protection:

- Side impact included
- RWF at least till 15 months of age




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i-Size 

Increased universality

- **any** i-size CRS can be used on **any** i-Size seating position in a car
- **IMPROVED CAR INTERFACE!**
(appreciate OICA cooperation)




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i-Size 

Planning:

- Phased introduction from 2013 onward
- Phase1: isofix CRS, integral harness*)
- ECE R44 Phasing out
- Phase 2 non integral CRS may 2014
- Phase 3 belted integral CRS may 2014

*) exception likely for travel systems



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I-SIZE

Phase 2: non integral CRS

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Phase 2: non integral CRS 

Phase 2, non integral CRS:

- Universal booster seat (<135cm, backrest +sidewings)
- Universal booster (>135, side protection by car)




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Phase 2: non integral CRS 

Isifix optional (and must be stowable):


- No proven benefits in accidentology
- Difficult to define universal isofix car interface (alignment)
- Isofix boosters appreciated by consumers – user friendly
- Lower misuse rates in field study

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Phase 2: non integral CRS 


- Stature based
- Side impact test
- Issues:
 - Belt geometry (+relation isofix anchorages)
 - Belt guidance

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Phase 2: non integral CRS 


Euro NCAP:

- increased attention for car-CRS interface
- So far encouraging findings, to be fed into regulatory discussions
- Credits for i-Size ready seating positions



Kidfix in Renault Captur (supermini)


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Phase 2: non integral CRS 

ANEC wish list:

- Improved belt geometry and belt guidance
- Improved car interface, universal isofix, cooperative attitude OEM's -> so far discussions disappointing
- Keep transitional period short


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I-SIZE

Phase 3: belted integral systems


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Phase 3: belted integral CRS 

Two approaches proposed:

1. Include all belted systems (meeting either R44 or i-size requirements) in R44 – Rxxx exclusively isofix.
2. Include all stature based classified CRS, meeting new requirements in new Regulation. Keep R44 for mass based classified CRS, and stop approvals after transitional period.


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Phase 3: belted integral CRS 

From consumer point of view option 2 is preferable:

- Clear message: check for Rxxx approval (all state of the art products same Regulation).
- No mix of mass and stature based products in one Regulation


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Communication to consumers 

Challenges:

- Bridging transitional period – for both cars and CRS
- Raise awareness on new Regulation
- Avoid confusion


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Communication to consumers 

From ANEC perspective:

- I-Size: the next generation, but don't dismiss R44!
- Emphasise improvements on usability and safety
- Information needed on use in 'old style' R16 approved cars

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Communication to consumers 

Issues:

- only few I-size ready labelled seating positions in cars available in the early stages

-> in practise: when it fits in a car, it can be used in old style 'semi-universal' positions

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Communication to consumers 

Issues:

- EU Seat Belt Wearing Directive allows only R44 CRS, and cannot be modified in time.

-> EC: i-size regulation can be considered as an improvement of R44. EC will communicate this in a 'Commission Interpretation' if necessary

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Communication to consumers 

Issues:

- for some time two different regimes for CRS approval (mass vs stature based) are operational alongside each other

-> keep transitional period short


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Communication to consumers 

Informal (ANEC/CLEPA/EC) discussion started on how to communicate i-size to the public :

- need and wish for uniform communication
- manufacturers need also endorsement by 'authorities' as support
- uniform response to questions from the public (Q & A)
- stakeholders invited in informal group, GRSP


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Communication to consumers 

EC taking the lead in developing postcard flyer:

- advantages of i-size
- different languages
- EC recommendation
- for distribution at retail points etc

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Communication to consumers 

Consumer program ETC will publish test results on i-size CRS as soon as feasible.

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The European consumer voice in administration

Thank you for your attention

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